



City of Long Beach

“The Next 100 Years”

Overview of the Final Design

Long Beach Boardwalk

March 5, 2013

Stronger, Smarter, Safer





Presentation Overview

HISTORY

- What we had
- What happened

PROCESS

- City Council Direction
- Public Input
- Best Practices Elsewhere
- Discussions with other stakeholders
- LiRo Expertise and Recommendation

RESULT

- What We Are Doing, and Why











Boardwalk Facts:

Length: 2.2 miles

Decking: Southern Yellow Pine

Stringers: Pressure Treated Lumber

Lighting: 98 150W Induction Lights

Railing: Aluminum

Benches: over 750

Superstorm Sandy

The most devastating storm in our history













Process

- City Council Direction
 - 10 Step Plan
- Public Input – Long Beach Listens
 - Sustainable Long Island
- Best Practices Used Elsewhere
- Discussions with other stakeholders
- LiRo Expertise and Recommendation





City Council Direction

➤ The City Council gave very clear direction on what their priorities were:

- Durability
- Less Maintenance
- Functionality
- Resiliency
- Mitigation

The Council also asked for a concise, detailed plan that could be followed as we moved through this process.





The 10 Step Plan

1. Assess the damage of the boardwalk.
2. Complete the bidding process for demolition of the boardwalk.
3. Demolish the existing boardwalk structure.
4. Accept proposals and select an engineering consulting firm to:
 - a. Assess the strength of the concrete pillars to determine their weight capacity.
 - b. Create a list of boardwalk reconstruction options:
 - i. Design options (including wood, concrete, concrete/wood hybrid, composite, etc.)
 - ii. Cost of varying options
 - iii. Availability of materials for varying options
 - c. Create a pre-construction timeline for Phase 1 of boardwalk construction.
5. Determine design specifications.
 - a. Gather public input.
 - b. Present options and take direction from the City Council.
 - c. Move forward with design specifications that satisfy our mission to be stronger, smarter, and safer.
6. Present FEMA with our selected new design specifications (stronger, smarter, safer) and obtain approval for mitigation funding.
7. Engineering consulting firm is then responsible for:
 - a. Creation of design specifications for the City to put out to construction bid.
 - b. Assisting the City in selecting a construction vendor.
 - c. Providing the City with construction management services.
 - d. Creating a timeline for Phase 1 of boardwalk construction.
8. The City and the engineering consulting firm will monitor and hold construction work accountable to a tight timeline.
9. The City will open areas of completed boardwalk, when appropriate, as they become available.
10. Phase 1 will end upon the complete construction of the 2.2-mile boardwalk.



The 10 Step Plan

Items completed...

- ✓ 1. Assess the damage of the boardwalk.
- ✓ 2. Complete the bidding process for demolition of the boardwalk.
- ✓ 3. Demolish the existing boardwalk structure.
- ✓ 4. Accept proposals and select an engineering consulting firm.
- ✓ 5. Determine Design Specifications
- ✓ 6. Present FEMA With Our Selected New Design Specifications



The 10 Step Plan

Where we are Now:

7. Engineering consulting firm is then responsible for:

- a. Creation of design specifications for the City to put out to construction bid.***
- b. Assisting the City in selecting a construction vendor.
- c. Providing the City with construction management services.
- d. Creating a timeline for Phase 1 of boardwalk construction





The 10 Step Plan

- The remaining steps of the plan for the City to do are:
 - 8. With LiRo, monitor & hold construction work accountable to a tight timeline
 - 9. Open areas of completed boardwalk, when appropriate, as they become available.
 - 10. Phase 1 will end upon the complete construction of the 2.2-mile boardwalk





Long Beach Listens

- Public input was an important part of this process.
- The City Council recognized the connection between the public and this project.
- Sustainable Long Island was brought on board to help make sure that the concerns of the public were heard and gathered in a thoughtful way.





Long Beach Listens

During the Long Beach Listens public outreach process in coordination with Sustainable Long Island:

- ✓ We contacted over 15,000 residents
- ✓ Over 2,400 participants took our online survey
- ✓ Over 250 residents attended one of four focus group sessions
- ✓ Over 200 people attended the summary meeting on February 20th





Long Beach Listens

Issues and values that we heard for rebuilding the boardwalk were:

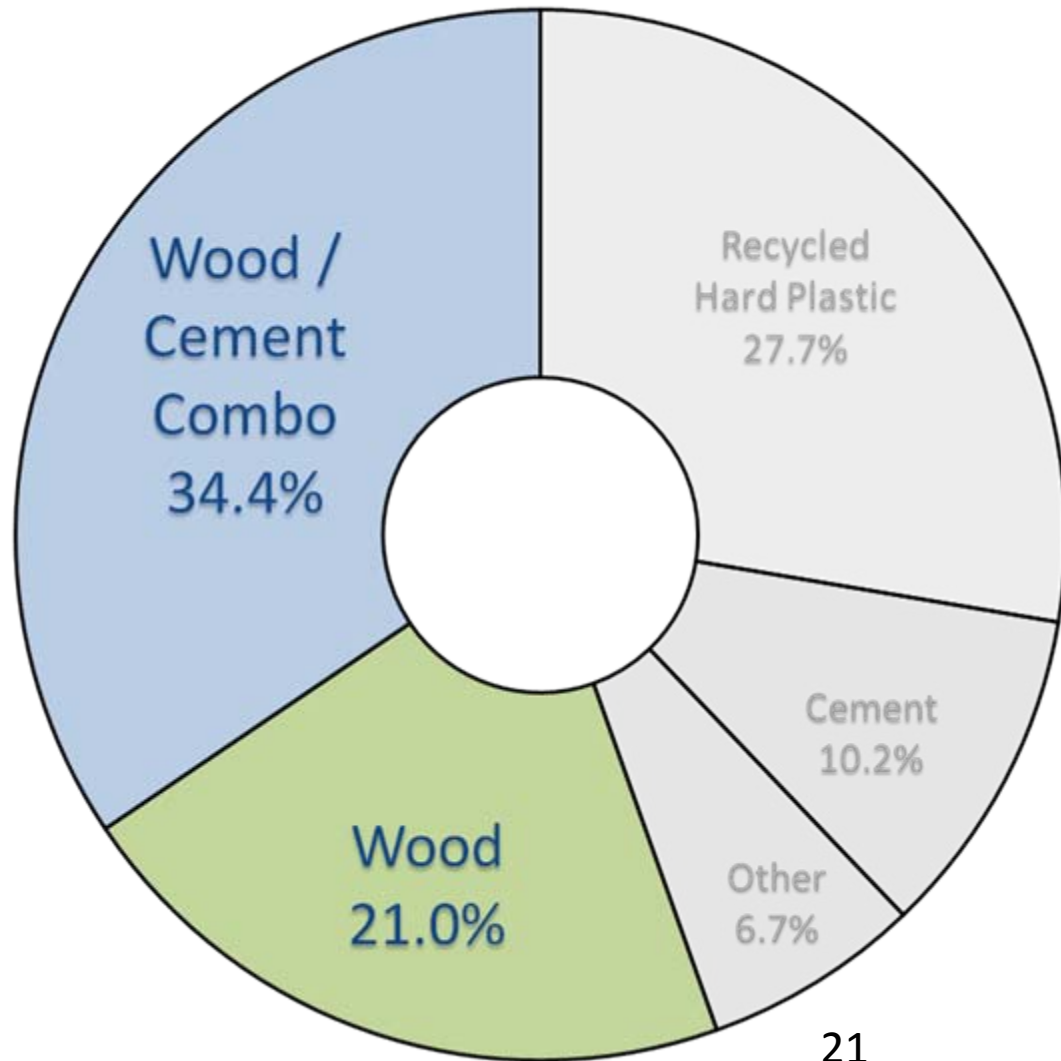
- ✓ Durability and resistance
- ✓ Quality of life issues
- ✓ Open to all types of exercise and recreational activities
- ✓ Less maintenance
- ✓ Aesthetically appealing
- ✓ Screws, not nails
- ✓ Accessible to everyone



and we listened!



Long Beach Listens





Best Practices Used Elsewhere

Looking to see what was done elsewhere, how it performed, and what changes other municipalities were making after the storm played a large role in helping us determine how to move forward.





Best Practices Used Elsewhere

Projects Reviewed:

- City of New York
- Belmar, New Jersey
- Ocean City, Maryland
- Atlantic City, New Jersey
- Jones Beach State Park, Long Island





Best Practices Used Elsewhere

The City Council and City Manager, along with our engineering firm LiRo, went and examined boardwalks of varying construction types to see how they held up to Sandy at:

- Coney Island, New York
- Jones Beach State Park, Long Island
- Rockaway, New York
- Sunken Meadow State Park, Long Island







Discussions with Other Stakeholders

Throughout this process, the Department of Public Works has been engaged in conversations with:

- ✓ FEMA
- ✓ Army Corps of Engineers
- ✓ New York State Department of Homeland Security
- ✓ New York State Department of Environmental Conservation
- ✓ Office Of Senator Charles Schumer
- ✓ Office of Congresswoman Carolyn McCarthy
- ✓ Office of Governor Andrew Cuomo
- ✓ Office of NYS Senator Dean Skelos
- ✓ Office of NYS Assemblyman Harvey Weisenberg





Discussions with Other Stakeholders

Three issues focused on:

1. Boardwalk project not impeding or interfering with any other project
2. Input from these agencies to gather their thoughts/ideas/concerns
3. Make sure funding is in place to assist City





LiRo Expertise and Recommendation

- Utilizing their vast experience as well as the input from the City, the public and other municipal agencies, the LiRo group presented a boardwalk design that was approved by the Department of Public Works.
- The design addresses our core concerns, and provides the resiliency and durability that were the focal points of all involved.



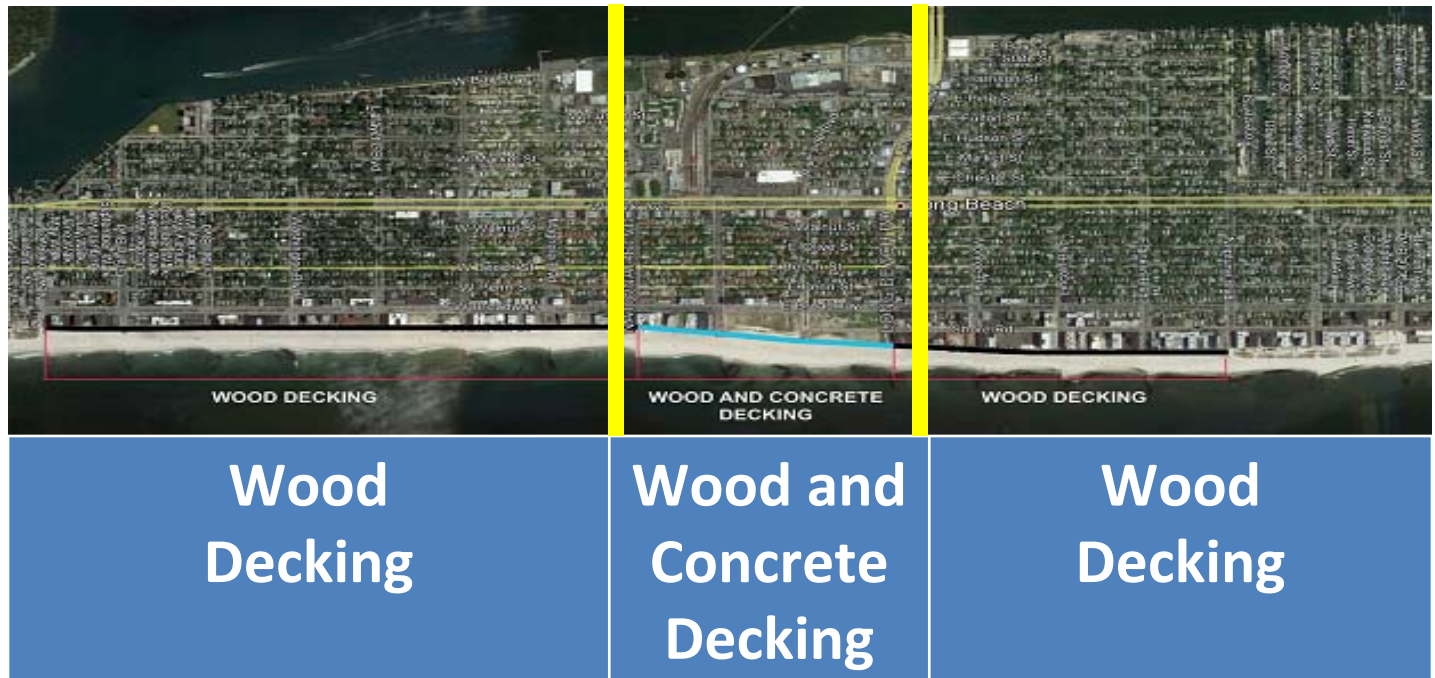
Boardwalk Design

So Here it is.....



Boardwalk Design

➤ Site plan...



Boardwalk Design

Use of a Sustainable Tropical Hardwood for the wooden sections of the boardwalk

- Aesthetically pleasing
- Resilient for joggers
- Limited Splinters
- Low Maintenance
- 30-40 year lifespan
- Used throughout New York, New Jersey including the Long Beach Shorefront Park



Boardwalk Design

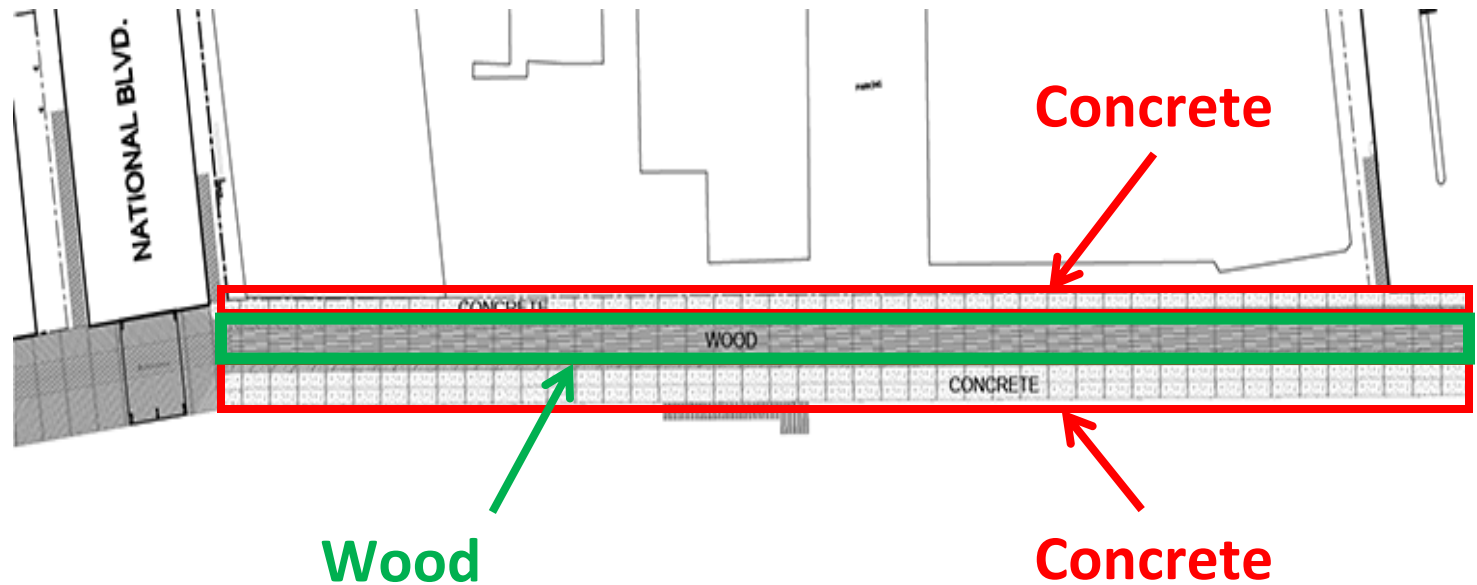
Textured finish concrete planks

- Durable
- Low Maintenance
- Can be stamped with virtually any design
- 40 year lifespan



Boardwalk Design

- From National Boulevard to Long Beach Road, a wood/concrete combination will be used



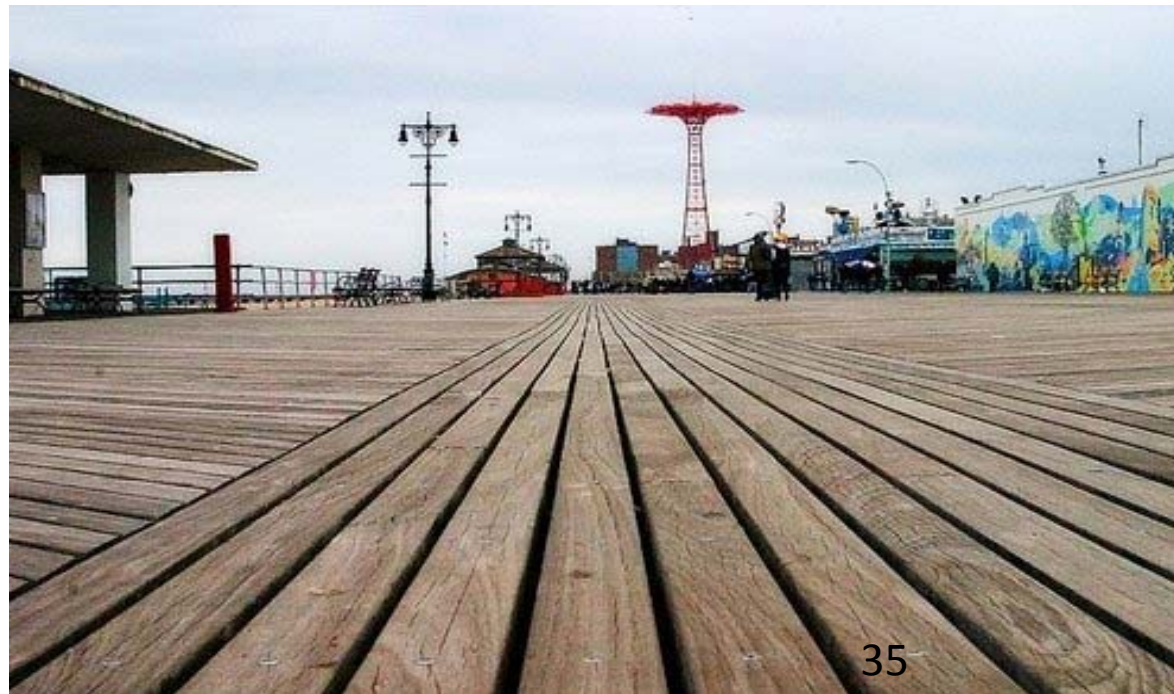
Boardwalk Design

- Additional features to be added:
 - The installation of vinyl/fiberglass sheeting, combined with the stringers & supports for the boardwalk itself will combine to serve as a **wave-break wall**:
 - Will mitigate wave action from passing the south side of the boardwalk, thus preventing the same type of damage resulting from Superstorm Sandy



Boardwalk Design

- Changing the direction of the boards to go East-West instead of North-South in the bike lane
 - Promotes the flow of bicycles, strollers, and wheelchairs by reducing vibrations



Boardwalk Design

Aluminum pipe rail



Boardwalk Design



“Bishop’s crook”
pole and fixture





Bid Award Process

- Next Steps – Pre-Bid Procedures:
 - First, finalize contract documents and specifications.
 - Announcement of Bid Availability (Monday March 11th)
 - Release Documents to Prospective Bidders: Thursday March 14th
 - Bid Opening: March 28th
 - Award of Bid: First Week in April





Next Steps

After the completion of Phase One, we will begin discussions regarding Phase Two of our Beachfront Infrastructure Restoration Program

Phase 2 will consider the following:

- Concessions
- Comfort and wash stations
- Bump outs for seating and shade
- Wi-Fi
- Other amenities





Thank you!

- To everyone that played a part:
 - City Council members
 - City Manager's staff
 - Sustainable Long Island
 - LiRo Group
 - Residents, businesses, and groups that helped to drive this process forward
- It was our goal to move through this process as thoughtfully as possible

